

## ABSTRACT

Power line communication ("PLC") signals are transmitted between a head-end PLC transceiver coupled to multiple remote PLC transceivers over a electric power and communications distribution network in accordance with a timing controlled PLC data frame which determines how much bandwidth is allocated to downstream transmission from the head-end to the remotes and to upstream transmissions from one or more of the remotes to the head-end. The configuration of the timing controlled data frame can be dynamically modified to achieve higher bandwidth for the downstream traffic and to satisfy changing bandwidth needs of each remote.